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RECEIVED

MAR 09 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

March 9, 2000

Via Hand Delivery

Magalie Roman Salas, Esq.
 Secretary
 Federal Communications Commission
 445 12th St SW
 Washington, D.C. 20554

Re: Ex Parte Presentation -- RM 9740 and ET Docket No. 99-261

Dear Ms. Salas:

This letter is to inform you that on March 8, 2000 ex parte presentations were made regarding RM-9740 to following Commission personnel:

- Bryan Tramont, Esq (Office of Commissioner Furchgott-Roth)
- Mark Schneider, Esq. (Office of Commissioner Ness)
- Adam Krinsky, Esq. (Office of Commissioner Tristani)
- Peter Tenhula, Esq. (Office of Commissioner Powell)
- Mr. William Luther (International Bureau)
- Mr. Allen Yang (International Bureau)
- David Kirschner, Esq. (Office of Engineering and Technology)
- Mr. Tom Mooring (Office of Engineering and Technology)
- Mr. Tom Derenge (Office of Engineering and Technology)

A copy of a written presentation to the above staff members is attached hereto. The written presentation was delivered to the above personnel during meetings between such personnel and representatives of the Committee on Radio Frequencies ("CORF"), discussing the topics set forth in the written presentation.

In addition, CORF had discussions regarding ET Docket 99-261 with the following members of the Commission's staff:

- David Kirschner, Esq. (Office of Engineering and Technology)
- Mr. Tom Mooring (Office of Engineering and Technology)

Magalie Roman Salas, Esq.
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In regards to that Docket, the parties discussed proposed allocations and footnote protections for the Radio Astronomy, Space Research and Earth Exploration Satellite Services in the 59-65 Ghz Bands.

An original and one copy of this letter and two copies of the attached presentation is being filed. If additional copies of this filing are required, CORF will supply them immediately upon request.

Should any questions arise concerning this matter, or should any additional information be necessary or desired, please communicate with me.

Very truly yours,

FLETCHER, HEALD & HILDRETH

A handwritten signature in black ink, appearing to read "Paul Feldman", with a long horizontal flourish extending to the right.

Paul J. Feldman
Counsel for The Committee on
Radio Frequencies

cc: Bryan Tramont, Esq (via hand)
Mark Schneider, Esq. (via hand)
Adam Krinsky, Esq. (via hand)
Peter Tenhula, Esq. (via hand)
Mr. William Luther (via hand)
Mr. Allen Yang (via hand)
David Kirschner, Esq. (via hand)
Mr. Tom Mooring (via hand)
Mr. Tom Derenge (via hand)

PRESENTATION BY THE COMMITTEE ON RADIO FREQUENCIES

-As the Commission has long recognized, radio astronomy is a vitally important tool used by scientists to study our universe. Through the use of radio astronomy, scientists have in recent years discovered the first planets outside the solar system, circling a distant pulsar. Measurements of radio spectral line emission have identified the birth sites of stars in our own Galaxy, and help explain the evolution of galaxies in the Universe.

-In addition to increasing knowledge of our world and the universe, radio astronomy has produced substantial benefits to the communications industries and the public through the development of very-low-noise receivers and many other applications used in a variety of other radio applications. In addition, the technique of very-long-baseline interferometry ("VLBI"), developed for cosmic observations, is increasingly producing substantial benefits through use in terrestrial observations, including measurements of global distances (e.g., identification of potential earthquake zones through measurement of fault motion).

-The Earth Exploration Service represents both a critical and unique resource for monitoring the Earth's atmosphere and oceans. Currently, instruments operating in the EES bands provide atmospheric, oceanic, and land measurements to support an extensive variety of scientific, commercial, and government (civil and military) data users. Applications of the data include aviation forecasts, hurricane and severe storm warning and tracking, seasonal and interannual climate forecasts, as well as many others.

-Hundreds of millions of federal dollars have been invested in RAS and EES research, by agencies such as the National Science Foundation, NASA, and NOAA. These investments, and the critical research they continue to produce, must be protected.

-As passive users of the spectrum, radio astronomers and Earth scientists have no control over the frequencies that they must observe, or over the character of the "transmitted" signal. These parameters are set by the laws of nature. Furthermore, the emissions that radio astronomers observe are extremely weak -- a typical radio telescope receives only about one-trillionth of a watt from even the strongest cosmic source. Because radio astronomy receivers are designed to pick up such remarkably weak signals, such facilities are therefore particularly vulnerable to interference from spurious and out-of-band emissions from users of neighboring bands, and those that produce harmonic emissions that fall into the RAS bands. Similarly, the emissions received by passive EESS radiometers in Earth orbit are weak by comparison with emissions from other services.

-For both radio astronomy and EES, out-of-band emissions from satellite sources are particularly harmful. The Commission recognized this by enacting detailed satellite emission limitations in Section 25.202(f) of the Rules.

-In response to a recent letter from a few satellite operators, the International Bureau released a Public Notice seeking comments as to whether the satellite out-of-band emission standards should be relaxed (RM-9740). Such an approach would be devastating to radio astronomy and the EES. The justifications presented by the satellite operators are recent advances in technology, and their use of higher frequency bands than in the past. Neither of these principles provides a basis for relaxing unwanted emission standards:

-The advance in technologies have resulted in massive increases in the construction and operation of satellites. The amount of harmful interference to passive scientific users on an aggregate basis has increased exponentially.

-Use of higher bands by satellite operators is no comfort to passive users, who have allocations up to 252 GHZ, and who make observations at even higher frequencies.

-The issue of satellite unwanted emission standards is currently being addressed by ITU Working Groups. FCC action prior to ITU action is unwarranted.

-The spectrum "windows" through which critical scientific research is performed are rapidly being fogged by out-of-band interference. Commission action, if any, in RM-9740, must place a high priority on reducing out-of-band interference.

-The spectrum is an invaluable national (and international) resource, like forests and oceans. Short-term cost savings allowing "pollution" usually produce long-term harm for everyone.